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VOL. 22 No. 45 November 10, 1972

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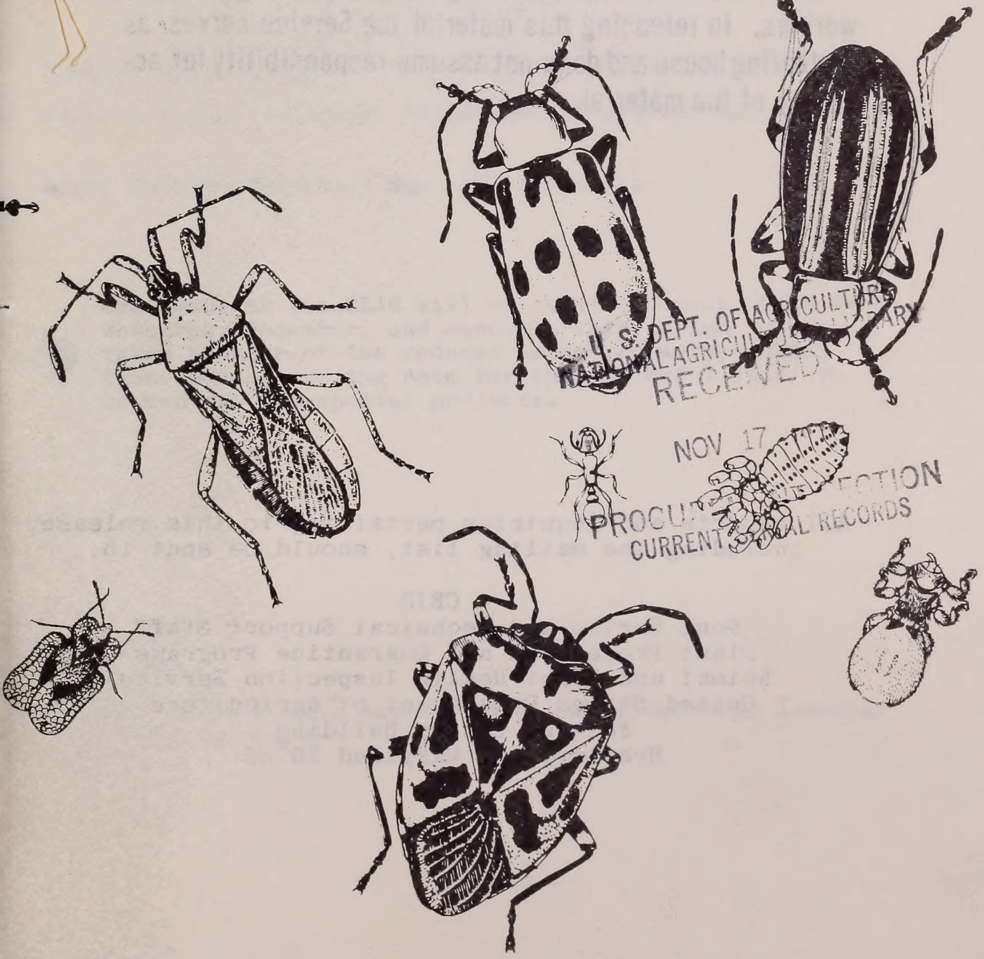
Cooperative Economic Insect Report

Issued by
PLANT PROTECTION AND QUARANTINE PROGRAMS
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
U.S.DEPARTMENT OF AGRICULTURE



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ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE PROGRAMS
PEST SURVEY AND TECHNICAL SUPPORT STAFF

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Service serves as a clearing house and does not assume responsibility for accuracy of the material.

All reports and inquiries pertaining to this release, including the mailing list, should be sent to:

CEIR
Pest Survey and Technical Support Staff
Plant Protection and Quarantine Programs
Animal and Plant Health Inspection Service
United States Department of Agriculture
Federal Center Building
Hyattsville, Maryland 20782

Volume 22 November 10, 1972 Number 45

COOPERATIVE ECONOMIC INSECT REPORT

HIGHLIGHTS

Current Conditions

GREENBUG continued to damage winter wheat in South Dakota. (p. 749).

FIRE ANT heavy on pastureland in south-central Texas past 14 days. (p. 750).

BERTHA ARMYWORM severely damaged sugar beet foliage in Columbia Basin of Washington during last half of October. (p. 750).

SOUTHERN PINE BEETLE outbreak spread southward on Uwharrie National Forest in central North Carolina. (pp. 751-752).

Special Reports

Alfalfa Weevil. Selected References 1968-1969. (pp. 755-757).

Gypsy Moth Quarantines. Map. (Centerfold).

● One issue of the CEIR will be published each month for November, December, and January. This action is being taken because of the reduced insect activity during these months and the need for the editorial staff to concentrate on special projects.

Reports in this issue are for week ending November 3 unless otherwise indicated.

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Gypsy Moth Quarantines. Map. (Centerfold).

NATIONAL WEATHER SERVICE'S 30-DAY OUTLOOK

NOVEMBER 1972

The National Weather Service's 30-day outlook for November calls for temperatures to average below seasonal normals in the southern Rocky Mountains and over the eastern half of the Nation except for near normal along the south Atlantic coast. Above normal temperatures are indicated for the Pacific Northwest and the California coast. Elsewhere near normal temperatures are in prospect. Precipitation is expected to exceed normal from the southern Plateau through the central and southern Plains to the Great Lakes region and the Appalachians. Subnormal totals are called for over California as well as northern and central portions of the Plateau region. In unspecified areas near normal precipitation is expected.

Weather forecast given here is based on the official 30-day "Resume and Outlook" published twice a month by the National Weather Service. You can subscribe through the Superintendent of Documents, Washington, D.C. 20250. Price $5.00 a year.

SPECIAL INSECTS OF REGIONAL SIGNIFICANCE

GREENBUG (Schizaphis graminum) - MISSISSIPPI - Very light in young wheat in Lowndes and Noxubee Counties. (Robinson). TEXAS - Surveys made in wheat fields in 20 Panhandle counties. Counts per row foot by county: Hansford 60, Deaf Smith 50, Briscoe 39, Parmer 30, Hartley 30. Counts ranged 1-20 in other counties surveyed. (Green). KANSAS - Averaged from trace to 1 per row foot in 3 small grain fields in Rice County, none to trace in 3 fields in Reno County and one field in Stafford County (October 24). Lady beetles noted in all fields. Generally light or absent in southwest and southeast district wheat October 27. (Bell). SOUTH DAKOTA - Still damaging winter wheat. Counts heaviest in Lyman, Jones, and Tripp Counties; 500+ per linear row foot noted in untreated western Stanley County fields. Noneconomic in Lawrence County. Infestation and damage heavier in early planted than in late planted fields. (Jones, Oct. 20).

SPOTTED ALFALFA APHID (Therioaphis maculata) - MISSISSIPPI - This species and Acyrthosiphon pisum (pea aphid) increased in Oktibbeha County alfalfa plots. Beneficials declined. (Robinson, Oct. 27). KANSAS - Counts in alfalfa per 10 sweeps by county: Rice (2 fields) 10-42; Reno (2 fields) 35-39; Stafford (1 field) 38. (Bell, Oct. 24).

CORN, SORGHUM, SUGARCANE

SOUTHERN CORNSTALK BORER (Diatraea crambidoides) - KANSAS - Larvae infested about 20 percent of stalks after harvest in cornfield in Pottawatomie County. All in overwintering form; most had not bored into lower stem. (Bell, Oct. 24).

SOUTHWESTERN CORN BORER (Diatraea grandiosella) - KANSAS - Recent survey showed substantial infestations in some corn in Morton County in southwest district. In 3 fields checked, percent infested stalks ranged 44-64 and percent stalks girdled and lodged ranged 12-44. Infestations much lighter in other southwest counties. (Bell, Oct. 27).

EUROPEAN CORN BORER (Ostrinia nubilalis) - ALABAMA - Numerous full-grown larvae seen in volunteer late corn in late soybean field at Summerdale, Baldwin County. Larval surveys negative in old cornfields in Mobile, Monroe, and Wilcox Counties. (McQueen).

NORTHERN CORN ROOTWORM (Diabrotica longicornis) - VIRGINIA - Adults feeding on corn silks in Wythe County August 21 collected by P.A. Willoughby and in Montgomery County August 18 by L.T. Kok. Determined by W.A. Allen. These are new county records. (Allen, Oct. 26).

SORGHUM MIDGE (Contarinia sorghicola) - KENTUCKY - Problem on late planted sorghum in western area. (Barnett, Raney).

SMALL GRAINS

HESSIAN FLY (Mayetiola destructor) - ILLINOIS - Averaged 239 (ranged 210-260) larvae and puparia per 100 tillers in nonresistant varieties and 50 (ranged 42-58) in resistant varieties of winter wheat in Wayne County. All varieties planted before "fly-free" dates of October 9-11 for county. All stages of immatures found. Puparia made up about 2 percent of total. Damage in these plots appeared noneconomic. (Ill. Ins. Rpt.).

TURF, PASTURES, RANGELAND

FALL ARMYWORM (Spodoptera frugiperda) - MISSISSIPPI - Still heavy in spots throughout ryegrass pastures in Amite County. (Robinson).

FIRE ANT (Solenopsis geminata) - TEXAS - Heavy in pastureland in Brazos and Burleson Counties past 2 weeks. Heavy activity also noted on vacant lots throughout College Station, Brazos County. Infestations ranged 10-30 mounds per acre at some locations. (Green).

FORAGE LEGUMES

ALFALFA PLANT BUG (Adelphocoris lineolatus) - VIRGINIA - Adults collected in Montgomery County alfalfa field October 18, 1972, by R. Pienkowski. This is a new county record. Although probably widespread in State, this is only third record. Previously recorded from alfalfa at Purcellville, Loundown County, and in Tazewell County. (Allen).

SOYBEANS

VELVETBEAN CATERPILLAR (Anticarsia gemmatalis) - ALABAMA - Adults heavy in late fields in Mobile and Baldwin Counties. Few larvae on kudzu and isolated greenspots in late soybeans. When leaves disappear, larvae feed freely on soybean pods and green stems. (McQueen).

SOUTHERN GREEN STINK BUG (Nezara viridula) - ALABAMA - Adults light in late soybean fields in Mobile and Baldwin Counties; mostly in green spots where live pods and leaves remain. (McQueen).

COTTON

BOLLWORMS (Heliothis spp.) - ARIZONA - Heavy in blooms and small bolls in northwest area of Salt River Valley, Maricopa County. (Ariz. Coop. Sur.).

BOLL WEEVIL (Anthonomus grandis) - ALABAMA - Adults light to heavy on late squares and blooms in all fields surveyed in Wilcox, Monroe, and Montgomery Counties. Most appear to be young adults. (McQueen).

BANDEDWING WHITEFLY (Trialeurodes abutilonea) - ALABAMA - Egg laying and nympal feeding still occurring in second growth in several fields in Mitylene area of Montgomery County. Expected to continue until stalk destruction or killing frost. (McQueen).

SUGAR BEETS

BERTHA ARMYWORM (Mamestra configurata) - WASHINGTON - Larvae caused severe foliage damage to sugar beets last half of October in many sugar beet fields in Columbia Basin, Franklin, Adams, and Grant Counties. (Johansen, Foeppel).

MISCELLANEOUS FIELD CROPS

HAWAIIAN BEET WEBWORM (Hymenia recurvalis) - VIRGINIA - Adults very heavy in weedy areas, tomato fields, soybean fields, and other crops. Developed from heavy infestations occurring on pigweed about mid-September in Accomack and Northampton Counties. (Hofmaster, Oct. 18).

POTATOES, TOMATOES, PEPPERS

POTATO TUBERWORM (Phthorimaea operculella) - VIRGINIA - Damage heavy to untreated potato foliage, some still present in treated fields in Accomack and Northampton Counties. (Hofmaster, Oct. 18).

GENERAL VEGETABLES

GREEN PEACH APHID (Myzus persicae) - MARYLAND - Ranged 3-5 per 20 row feet in 600 acres of spinach near Vienna, Dorchester County. (U. Md., Ent. Dept.).

CABBAGE LOOPER (Trichoplusia ni) - MARYLAND - Larvae light, ranged 1-2 per 20 row feet, in 600 acres of spinach near Vienna, Dorchester County. (U. Md., Ent. Dept.).

DECIDUOUS FRUITS AND NUTS

GREEN PEACH APHID (Myzus persicae) - OREGON - Alates and true sexuals heavy on remaining leaves of peach trees in commercial orchards in The Dalles and Hood River area, Wasco and Hood River Counties. Most leaves infested with at least one alate and sexual. No eggs seen. (Fields).

PEAR PSYLLA (Psylla pyricola) - WASHINGTON - Overwintering adults heavy (about 1 per leaflet) on non-abscissed pear leaves at Yakima, Yakima County. (Landis, Oct. 24).

TWIG GIRDLER (Oncideres cingulata) - ALABAMA - Caused heavy twig fall on hickory, pecan, persimmon, and red oak trees in Tallapoosa, Lee, Randolph, and Chambers Counties. (Jackson et al.).

ORNAMENTALS

A SAP BEETLE (Conotelus mexicanus) - ARIZONA - Adults heavy in flowers of many home plantings of chrysanthemums and roses. Also up to 30 per cotton flower in Maricopa County. (Ariz. Coop. Sur.).

OLIVE SCALE (Parlatoria oleae) - DELAWARE - Common on cherry-leaf laurel in one area of Sussex County. Collected by N. Cannon at Seaford August 7. Determined by D.F. Bray. This is a new State record. (Burbutis, Kelsey).

A MEALYBUG (Conchaspis angraeci) - FLORIDA - Adults collected from umbrella tree (Grassaia actinophylla) at nursery in Gainesville, Alachua County, September 18. This is a new county record. (Graham).

FOREST AND SHADE TREES

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - NORTH CAROLINA - Evaluation of outbreak conducted on Uwharrie National Forest

(Randolph, Montgomery, and Davidson Counties) during August and September shows southward spread from northernmost section of forest. About 3,026 trees attacked (primarily shortleaf pine) in 74 spots within 220,000-acre forest. Thirty-seven percent of trees actively infested. (Hunt).

A BARK BEETLE (Ips calligraphus) - ALABAMA - Population explosion killed 80-90 percent of 6 to 10-year-old pine plantings on ornamental area around livestock coliseum at Monroeville, Monroe County. Contributing factor may be large pulpwood yard located within 150 feet where salvaged wood stacked for shipment to mills. (McQueen).

DOUGLAS FIR TUSSOCK MOTH (Hemerocampa pseudotsugata) - NEW MEXICO - Heavy populations caused defoliation of Douglas-fir in Los Alamos, Los Alamos County. Light populations caused some defoliation of spruce and fir in Santa Fe, Santa Fe County. (N. M. Coop. Rpt.).

COOLEY SPRUCE GALL APHID (Adelges cooleyi) - NEW MEXICO - Heavy on blue spruce in Los Alamos, Los Alamos County; and Tesuque and Santa Fe, Santa Fe County. (Heninger).

VARIABLE OAKLEAF CATERPILLAR (Heterocampa manteo) - OKLAHOMA - Larvae still common on oak trees in Robbers Cave State Park area, Latimer County, October 29. (Okla. Coop. Sur.).

A NOTODONTID MOTH (Symmerista albifrons) - WEST VIRGINIA - Larvae caused light damage to white oak at New Creek, Mineral County. Collected by D. Eskridge September 6, 1972. Determined by J.D. Hacker. This is a new county record. (Hacker).

OYSTERSHELL SCALE (Lepidosaphes ulmi) - NEW MEXICO - Heavy on large planting of mountain cotton wood in Santa Fe, Santa Fe County. (Heninger).

MAN AND ANIMALS

SCREWWORM (Cochliomyia hominivorax) - Total of 3,309 confirmed cases reported in continental U.S. during period October 22-28 as follows: Texas 3,049; Arizona 156; Oklahoma 65; New Mexico 36; Arkansas 1; Louisiana 1; Florida 1. Arkansas case discovered near Nashville, Howard County, is sixth confirmed case from area. No recent additions to herd; outbreak may be due to gravid female which flew in from infested area in Oklahoma. Louisiana case at Jennings, Jefferson Davis Parish, in neck wound of native calf. Florida case found on native steer in herd near busy cattle shipping and concentration point at Oxford, Sumter County. Twenty-five State and Federal workers assigned to special detection operation in area. Total of 756 cases reported from Mexico. Number of sterile flies released in U.S. this period totaled 154,702,000 as follows: Texas 130,732,000; Arizona 12,260,000; New Mexico 5,660,000; California 650,000; Louisiana 200,000; Florida 4,000,000; Alabama 200,000; Georgia 1,000,000. Total of 26,486,000 sterile flies released in Mexico. (Anim. Health).

COMMON CATTLE GRUB (Hypoderma lineatum) - OKLAHOMA - Ranged 0-13 per head (average 3 per head) on 22 cows in Payne County. (Okla. Coop. Sur.).

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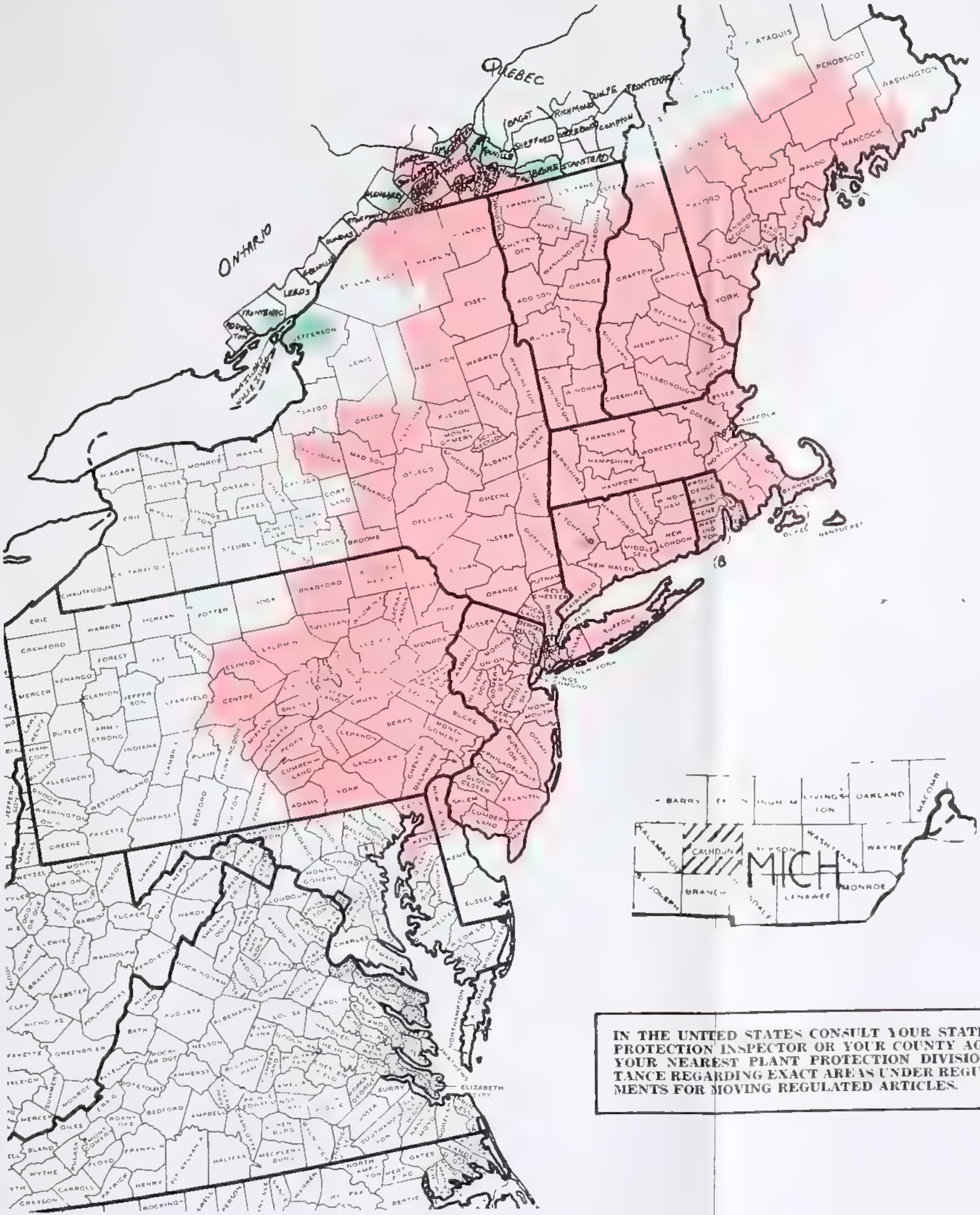
PENNSYLVANIA - (District) - Central, 10/23-30, BL - Black cutworm 1. Northwest, 10/23-30, BL - Armyworm 2, black cutworm 1. Southwest, 10/23-30, BL - Black cutworm 5, variegated cutworm 3, yellowstriped armyworm 1.

TEXAS - Waco, 10/2, BL - Armyworm 378, beet armyworm 81, black cutworm 4, cabbage looper (Trichoplusia ni) 1, fall armyworm 152, granulate cutworm 74, variegated cutworm 90, yellowstriped armyworm 6.

GYPSY MOTH QUARANTINES

U. S. DEPARTMENT OF AGRICULTURE
ANIMAL AND PLANT HEALTH INSPECTION SERVICE
PLANT PROTECTION AND QUARANTINE PROGRAMS
AND CANADA DEPARTMENT OF AGRICULTURE
COOPERATING WITH AFFECTED STATES



IN THE UNITED STATES CONSULT YOUR STATE OR FEDERAL PLANT PROTECTION INSPECTOR OR YOUR COUNTY AGENT AND, IN CANADA, YOUR NEAREST PLANT PROTECTION DIVISION OFFICE FOR ASSISTANCE REGARDING EXACT AREAS UNDER REGULATION AND REQUIREMENTS FOR MOVING REGULATED ARTICLES.

REVISED SEPTEMBER 5, 1972

COUNTIES ENTIRELY COLORED ARE COMPLETELY REGULATED:
COUNTIES PARTIALLY COLORED ARE PARTIALLY REGULATED

🟥 GENERALLY INFESTED AREA-STATE, FEDERAL, AND CANADIAN REGULATIONS
(ERADICATION TREATMENTS NOT IN PROGRESS OR PLANNED)

🟩 SUPPRESSIVE AREA-STATE, FEDERAL, AND CANADIAN REGULATIONS
(SUPPRESSIVE TREATMENTS IN PROGRESS OR PLANNED)

▨ ERADICATED—REGULATION REMOVED

RESTRICTIONS ARE IMPOSED ON MOVEMENT OF REGULATED ARTICLES FROM A REGULATED AREA AS FOLLOWS:

1. FROM RED INTO OR THROUGH GREEN OR WHITE
2. FROM GREEN INTO OR THROUGH WHITE.
3. GREEN INTO GREEN
4. WITHIN GREEN.*

*IF REQUIRED BY AN AUTHORIZED INSPECTOR

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Florida 4,000,000; Alabama 200,000; Georgia 1,000,000. Total
26,486,000 sterile flies released in Mexico. (Anim. Health).

COMMON CATTLE GRUB (Hypoderma lineatum) - OKLAHOMA - Ranged
per head (average 3 per head) on 22 cows in Payne County. (C
Coop. Sur.).

ORN FLY (Haematobia irritans) - OKLAHOMA - Ranged 20-25 per head n cattle in Payne County and 10-50 per head in Major County. (Okla. Coop. Sur.). MISSISSIPPI - oderate in Pawnee County. dults averaged less than 100 per animal in Oktibbeha, Noxubee, nd Lowndes Counties. (Robinson).

TABLE FLY (Stomoxys calcitrans) - OKLAHOMA - Declined to 0.5 per ead on untreated dairy cattle in Payne County. (Okla. Coop. Sur.).

ENEFICIAL INSECTS

ONEY BEE (Apis mellifera) - NORTH DAKOTA - Honey production by ommercial apiaries (300 or more colonies) totaled 7,192,000 ounds in 1972; a 70-percent increase from 1971. This represents ncrease in number of colonies and yield per colony. Colonies otaled 58,000, five percent above 1971; an average yield of 124 ounds per colony is 61 percent above the average yield in 1971. ate summer rains resulted in good honey flow from sunflower and ther late blooms. (Brandvik).

FEDERAL AND STATE PLANT PROTECTION PROGRAMS

PINK BOLLWORM (Pectinophora gossypiella) - ARIZONA - Cotton flooded and buried by recent flooding of Gila River at Safford, Graham County, harboring heavy larval populations. Most bolls examined contained live larvae. Larvae easily found in top crop at Deer Valley, Maricopa County. (Ariz. Coop. Sur.). ARKANSAS - Moths collected in Johnson County October 6 and in Franklin County October 16 by Cato. Determined by R.W. Hodges. These are first times collected in these counties. (PP).

RANGE CATERPILLAR (Hemileuca oliviae) - NEW MEXICO - Adults very heavy at Raton, Colfax County; lighter populations extend 5 miles north of Wagon Mound, Mora County. (Patterson).

SOYBEAN CYST NEMATODE (Heterodera glycines) - MISSISSIPPI - Collected from soybeans at Houlka, Chickasaw County, October 4 by L.B. Clayton. Determined by V.H. Owens. Confirmed by A.M. Golden. This is a new county record. (PP).

LIGHT TRAP COLLECTIONS

FLORIDA - Gainesville, 10/27-11/2, BL - Armyworm (Pseudaletia unipuncta) 2, beet armyworm (Spodoptera exigua) 3, fall armyworm (Spodoptera frugiperda) 3, granulate cutworm (Feltia subterranea) 3, yellowstriped armyworm (Spodoptera ornithogalli) 1.

KANSAS - Great Bend, 10/11-17, BL - Army cutworm (Euxoa auxiliaris) 248, armyworm 52, black cutworm (Agrotis ipsilon) 16, corn earworm (Heliothis zea) 87, variegated cutworm (Peridroma saucia) 56.

PENNSYLVANIA - (District) - Central, 10/23-30, BL - Black cutworm 1. Northwest, 10/23-30, BL - Armyworm 2, black cutworm 1. Southwest, 10/23-30, BL - Black cutworm 5, variegated cutworm 3, yellowstriped armyworm 1.

TEXAS - Waco, 10/2, BL - Armyworm 378, beet armyworm 81, black cutworm 4, cabbage looper (Trichoplusia ni) 1, fall armyworm 152, granulate cutworm 74, variegated cutworm 90, yellowstriped armyworm 6.

THE FOLLOWING REGULATED ARTICLES MUST BE MOVED UNDER CERTIFICATE OR PERMIT YEAR-ROUND **EXCEPT** AS INDICATED

1. Trees, shrubs with persistent woody stems, and parts thereof, **except** seeds, fruits, and cones.

   Trees and shrubs, and parts thereof, are exempt if grown in a greenhouse throughout the year and so labeled on the outside of each container.*

   Cuttings, and scions with stems no greater than one-half inch in diameter are exempt.*

   Parts of trees and shrubs that have been dried, pressed, waxed, lacquered, varnished, or similarly surface-treated, are exempt.*

   Christmas trees are exempt.*

   Boughs and Christmas greenery are exempt.*

2. Timber and timber products, including but not limited to lumber, planks, poles, logs, cordwood, and pulpwood.

   Lumber is exempt if dressed or sawed four sides with ends clipped and free of surface bark, or if kiln dried, provided such lumber is shipped direct after processing and the waybill or other shipping document is marked to show that the lumber was shipped immediately after processing.*

   Manufactured wood products, such as shingles, flooring, furniture, handles, etc., are exempt.*

   Shavings, sawdust, wood flour, excelsior, and cedar bedding are exempt.*

3. Stone and quarry products.

   Stone and quarry products are exempt if processed by grinding or pulverizing.*

4. Mobile homes, recreational vehicles, and associated equipment moving from hazardous parks or recreational sites.

*Exempt if not exposed to infestation after the prescribed handling.

HAWAII INSECT REPORT

Corn, Sorghum - CORN EARWORM (Heliothis zea) heavy in 160+ acres of mature field corn at Kahuku, Oahu, week ending October 27. All ears with one or more late larvae. No controls applied. (Kawamura).

Sugarcane - SUGARCANE APHID (Longiunguis sacchari) nymphs and adults moderate in 100 acres at Honokaa, Hawaii. Lady beetle, lacewing, and syrphid fly predators moderate. (Ota).

General Vegetables - Larval mines of LEAFMINER FLIES (Liriomyza spp.) generally moderate to heavy in commercial snap beans at Waimanalo, Oahu; moderate on cotyledons in adjacent 0.1 acre of cucumber seedlings and 0.5 acre of soybeans in area. BEAN FLY (Melanagromyza phaseoli) trace in 3,000 square feet of long beans at Waimanalo. Remained negligible in commercial snap beans. (Kawamura).

Fruits and Nuts - About 75 coconut seedlings at Hawaii Kai, Oahu, with 30-40 percent of fronds with moderate to heavy COCONUT SCALE (Aspidiotus destructor) colonies on 30-60 percent of pinnae. Larvae and adults of Lindorus lophanthae (a lady beetle) heavy on some infested pinnae. (Kawamura). GREENHOUSE THRIPS (Heliothrips haemorrhoidalis) nymphs and adults moderate in 200 acres of passion fruit at Kahului, Maui: previously very light in this orchard. (Miyahira).

Forest and Shade Trees - Very heavy buildup of a GEOMETRID MOTH (Semiothisa santaremaria) and KOA HAOLE LOOPER (Anacamptodes fragilaria) noted in Waianae and Kaena Point areas of Oahu during October. Totals of 4,500 S. santaremaria and 250 A. fragilaria moths taken in single light trap during 12-hour period. Larval counts averaged 10 S. santaremaria and 4 A. fragilaria per terminal foot on koa haole (Leucana leucocephala) and kiawe (Prosopis pallida), major hosts of these pests. Larvae of a NOCTUID MOTH (Melipotis indomita) numerous under bark and debris at bases of these trees. (Kashiwai). A SPIDER MITE (Olingonychus mangiferus) moderate on 750 acres of native Acacia koa trees in Laupahoehoe rain forests on Hawaii. Found at lower altitudes as well as upper limits of forests (4,000 feet). Infested trees usually showed terminal malformation, causing stunted condition which culminates in death of affected branches. Prolonged infestations have killed these native trees. (Horiuchi). A DELPHACID PLANTHOPPER (Nesosydne koae) moderate on regenerated native koa trees at Laupahoehoe Forest Reserve. Adults, up to 20 per terminal, easily jarred from infested branches. Nymphs, 20-30 per sample, congregated only on young growth. (Kashiwai).

Beneficial Insects - On Lanai, Melanagromyza phaseoli (bean fly) moderate to heavy in long bean petioles during week ending October 27. M. phaseoli 28 percent parasitized by a BRACONID WASP (Opius importatus) and 12 percent parasitized by a PTEROMALID WASP (Halticoptera patellana). O. importatus released on Lanai in August 1972. On Kauai, Opius spp. parasitized 100 percent of M. phaseoli infesting cowpea and snap bean petioles at 7 locations during September. (Miyahira, Sugawa). Field examination of Melastoma malabathricum showed average infestations of fruit to be 48 percent at Hanahanapuni and 14 percent at Knudsen Gap on Kauai. (Sugawa).

ALFALFA WEEVIL
Hypera postica (Gyllenhal)

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DETECTION

New State Record - OLIVE SCALE (Parlatoria oleae) - DELAWARE - Sussex County. (p. 751).

New County Records - ALFALFA PLANT BUG (Adelphocoris lineolatus) VIRGINIA - Montgomery (p. 750). A MEALYBUG (Conchaspis angraeci) FLORIDA - Alachua (p. 751). NORTHERN CORN ROOTWORM (Diabrotica longicornis) VIRGINIA - Wythe, Montgomery (p. 749). A NOTODONTID MOTH (Symmerista albifrons) WEST VIRGINIA - Mineral (p. 752). SOYBEAN CYST NEMATODE (Heterodera glycines) MISSISSIPPI - Chickasaw (p. 753).

WEATHER OF THE WEEK ENDING NOVEMBER 6

Reprinted from Weekly Weather and Crop Bulletin supplied by Environmental Data Service, NOAA.

PRECIPITATION: A vigorous storm spread winter weather over the western Great Plains early in the week. Snow accumulated to several inches in parts of North Dakota and Minnesota; up to 2 feet or more in spots in South Dakota, Colorado, and western Nebraska; several inches in western Kansas. Gregory, South Dakota, received 25 inches of snow of which 20 inches remained on the ground Monday morning, November 6. In Nebraska, precipitation fell as snow in the west, rain in the east, and treacherous mixtures of snow, rain, and freezing rain in central sections. Southerly winds loaded the air over eastern portions of the country with moisture. As a cold front associated with the winter storm crossed the area, heavy rains fell from eastern Oklahoma to West Virginia and southward to the Gulf of Mexico. Totals ranged from 3 to 7 inches in northern Arkansas and 6 to 13 inches in the central part of that State. Flooding occurred along streams in Missouri and Arkansas. Hazelgreen, Missouri, received 7.32 inches of rain. Generous but lighter rains fell from the Great Lakes to the Ohio River Valley and east of the Appalachians. Precipitation was generally light west of the Rocky Mountains except in the Far Northwest where some heavy rains fell in the last half of the week. Southern California and western Arizona received no rain. Light precipitation occurred from eastern Arizona to western Texas. The weekend was pleasant in the Central and South but a new storm was developing in the northern Great Plains.

TEMPERATURE: The early winter storm spread cold weather over the Rocky Mountains and nearby Great Plains early in the week. Temperature at West Yellowstone, Montana, plunged to 11 degrees below zero Monday morning, October 30. Cold air continued southward. Alamosa, Colorado, recorded 4 degrees below zero Thursday morning. Subfreezing weather occurred in New Mexico and western Texas as far south as the Mexican border Wednesday and Thursday mornings. The western half of the Nation averaged cooler than normal. Temperatures over the central and southern Rocky Mountains and the western Great Plains averaged 6 to 15 degrees warmer than normal. Cold air reduced maximum temperatures over the East late in the week. Much of the area from the northern Mississippi River to New England did not warm higher than the 40's Saturday afternoon. Maximums in the 50's were common in Kentucky and Tennessee. Florida continued to warm to the 80's.

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